Louisiana Department of Environmental Quality (LDEQ) Office of Environmental Services

STATEMENT OF BASIS

ETC Tiger Pipeline, LLC
Bienville Compressor Station
Lucky, Bienville Parish, Louisiana
Agency Interest Number: 166494
Activity Number: PER20090001
Proposed Permit Number: 0360-00753-V0

I. APPLICANT

Company:

ETC Tiger Pipeline, LLC 800 E. Sonterra Boulevard, Suite 400 San Antonio, Texas 78258-3941

Facility:

Bienville Compressor Station 2.44 miles Northwest of Lucky, Bienville Parish, Louisiana Location: 32⁰ 17' 41.53" latitude, -93⁰ 2' 6.43" longitude

II. FACILITY AND CURRENT PERMIT STATUS

ETC Tiger Pipeline, LLC proposes to construct and operate the Bienville Compressor Station to transport natural gas from the growing Haynesville shale production region in east Texas and northwest Louisiana to markets in the Midwest, Northeast, and Southeast. At the Bienville Compressor Station, pressure of a natural gas pipeline will be elevated using compressors driven by six natural gas fired IC engines with a total of 42,190 horsepower. Other equipment includes an emergency generator, liquid loading, fugitives, and tanks for pipeline fluids, lube oil, skid wash water, and engine coolant.

III. PROPOSED PROJECT/PERMIT INFORMATION

Application

A permit application dated August 3, 2009 was submitted requesting a Part 70 operating permit.

Project

ETC Tiger Pipeline, LLC proposes to construct and operate the Bienville Compressor Station to transport natural gas from the growing Haynesville shale production region in east Texas and northwest Louisiana to markets in the Midwest, Northeast, and Southeast.

Proposed Permit

This is both a state preconstruction and Part 70 operating permit for the proposed Bienville Compressor Station.

Permitted Air Emissions (tons/year)

Pollutant	Emissions
PM ₁₀	12.65
SO ₂	11.93
NO _X	205.88
CO	108.50
VOC	91.33
LAC 33:III Chapter 51 Regulated To	oxic Air Pollutants
1,1,2,2-Tetrachloroethane	0.03
1,1,2-Trichloroethane	0.02
1,2-Dibromoethane	0.03
1,3-Butadiene	0.17
1,3-Dichloropropene	0.02
2,2,4-Trimethylpentane	0.16
2-Methylnaphthalene	0.02
Acetaldehyde	5.29
Acrolein	3.26
Benzene	0.30
Biphenyl	0.13
Carbon Tetrachloride	0.02
Chlorobenzene	0.02
Chloroform	0.02
Dichloromethane	0.01
Ethyl Benzene	0.03
Methanol	1.59
Formaldehyde	7.91
n-Hexane	0.99
Naphthalene	0.05
PAH	0.02
Phenol	0.02
Styrene	0.01
Toluene	0.29
Vinyl Chloride	0.01
Xylenes	0.14

IV REGULATORY ANALYSIS

The applicability of the appropriate standards is straightforward and provided in the Specific Requirements section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are also provided in the Specific Requirements Section of the proposed permit.

Applicability and Exemptions of Selected Subject Items

The explanations for the non-applicability and exemptions of selected subject items are listed in Table XI of the proposed permit.

Prevention of Significant Deterioration (PSD)/Nonattainment Review

Emissions of criteria pollutants will be below the PSD major source threshold of 250 tons/year. PSD review is not required.

Streamlined Equipment Leak Monitoring Program

The permit does not include any Streamlined Equipment Leak Monitoring Program.

MACT Requirements

Emissions of both Louisiana Toxic Air Pollutants (TAP) and Hazardous Air Pollutants (HAPs) will be below the major source threshold of 10/25 tons/year. The facility is a classified as a minor source of Toxic Air Pollutants (TAPs) pursuant to LAC 33:III.Chapter 51 and an area source of HAP. The proposed compressors and generator engines will be subject to 40 CFR 63 (NESHAP) Subpart ZZZZ. These engines will comply with this NESHAP standard by complying with 40 CFR 60 (NSPS) Subpart JJJJ as specified in 40 CFR 63.6590(c).

Air Quality Analysis

Screen dispersion model (ISCST3) indicates that maximum offsite concentration of criteria pollutant will be below the modeling significant levels. Refined model is not required.

Pollutant	Averaging Period	Calculated Maximum Ground Level Concentration (µg/m³)	
PM ₁₀	24 hour	1.28	150
	Annual	0.27	50
Sulfur Dioxide	3 hour	2.72	1300
	24 hour	1.15	365
	Annual	0.22	80
Nitrogen Dioxide	Annual	6.01	100
Carbon Monoxide	1 hour	90.81	40,000
	8 hour	63.57	10,000

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to the Section VIII – General Condition XVII Activities of the proposed permit.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to the Section IX – Insignificant Activities of the proposed permit.

V. PERMIT SHIELD

This permit does not contain any permit shield.

VI. PERIODIC MONITORING

To demonstrate compliance with the permit limits and applicable standards, NO_X, CO, and VOC emissions will be tested periodically as required by 40 CFR 60 Subpart JJJJ.

VII. GLOSSARY

Best Available Control Technologies (BACT) - An emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under this part which would be emitted from any proposed major stationary source or major modification which the administrative authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.

CAM - Compliance Assurance Monitoring rule - A federal air regulation under 40 CFR Part 64

Carbon Black - A black colloidal substance consisting wholly or principally of amorphous carbon and used to make pigments and ink.

Carbon Monoxide (CO) – (Carbon monoxide) a colorless, odorless gas produced by incomplete combustion of any carbonaceous (gasoline, natural gas, coal, oil, etc.) material.

Cooling Tower – A cooling system used in industry to cool hot water (by partial evaporation) before reusing it as a coolant.

Continuous Emission Monitoring System (CEMS) – The total combined equipment and systems required to continuously determine air contaminants and diluent gas concentrations and/or mass emission rate of a source effluent.

Cyclone – A control device that uses centrifugal force to separate particulate matter from the carrier gas stream.

Duct Burner – A device that combusts fuel and that is placed in the exhaust duct from another source (such as a stationary gas turbine, internal combustion engine, kiln, etc.) to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a steam generating unit.

Federally Enforceable Specific Condition - A federally enforceable specific condition written to limit the potential to Emit (PTE) of a source that is permanent, quantifiable, and practically enforceable. In order to meet these requirements, the draft permit containing the federally enforceable specific condition must be placed on public notice and include the following conditions:

- A clear statement of the operational limitation or condition which limits the source's potential to emit;
- Recordkeeping requirements related to the operational limitation or condition;
- A requirement that these records be made available for inspection by LDEQ personnel;
- A requirement to report for the previous calendar year.

Grandfathered Status- Those facilities that were under actual construction or operation as of June 19, 1969, the signature date of the original Clean Air Act. These facilities are not required to obtain a permit. Facilities that are subject to Part 70 (Title V) requirements lose grandfathered status and must apply for a permit.

Heat Recovery Steam Generator (HRSG) – A steam generator that recovers exhaust heat from a gas turbine, and provides economizing and steam generation surfaces.

Hydrogen Sulfide (H_2S) - A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the action of acids on metallic sulfides, and is an important chemical reagent.

Maximum Achievable Control Technology (MACT) - The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III. Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-

quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

NESHAP - National Emission Standards for Hazardous Air Pollutants -Air emission standards for specific types of facilities, as outlined in 40 CFR Parts 61 through 63

Nitrogen Oxides (NO_x) - Compounds whose molecules consists of nitrogen and oxygen.

Nonattainment New Source Review (NNSR) - A New Source Review permitting program for major sources in geographic areas that do not meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. Nonattainment NSR is designed to ensure that emissions associated with new or modified sources will be regulated with the goal of improving ambient air quality.

NSPS - New Source Performance Standards - Air emission standards for specific types of facilities, as outlined in 40 CFR Part 60

Organic Compound - Any compound of carbon and another element. Examples: Methane (CH_4) , Ethane (C_2H_6) , Carbon Disulfide (CS_2)

Part 70 Operating Permit- Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM₁₀- Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) - The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.